

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 11205273  
PUBLICATION DATE : 30-07-99

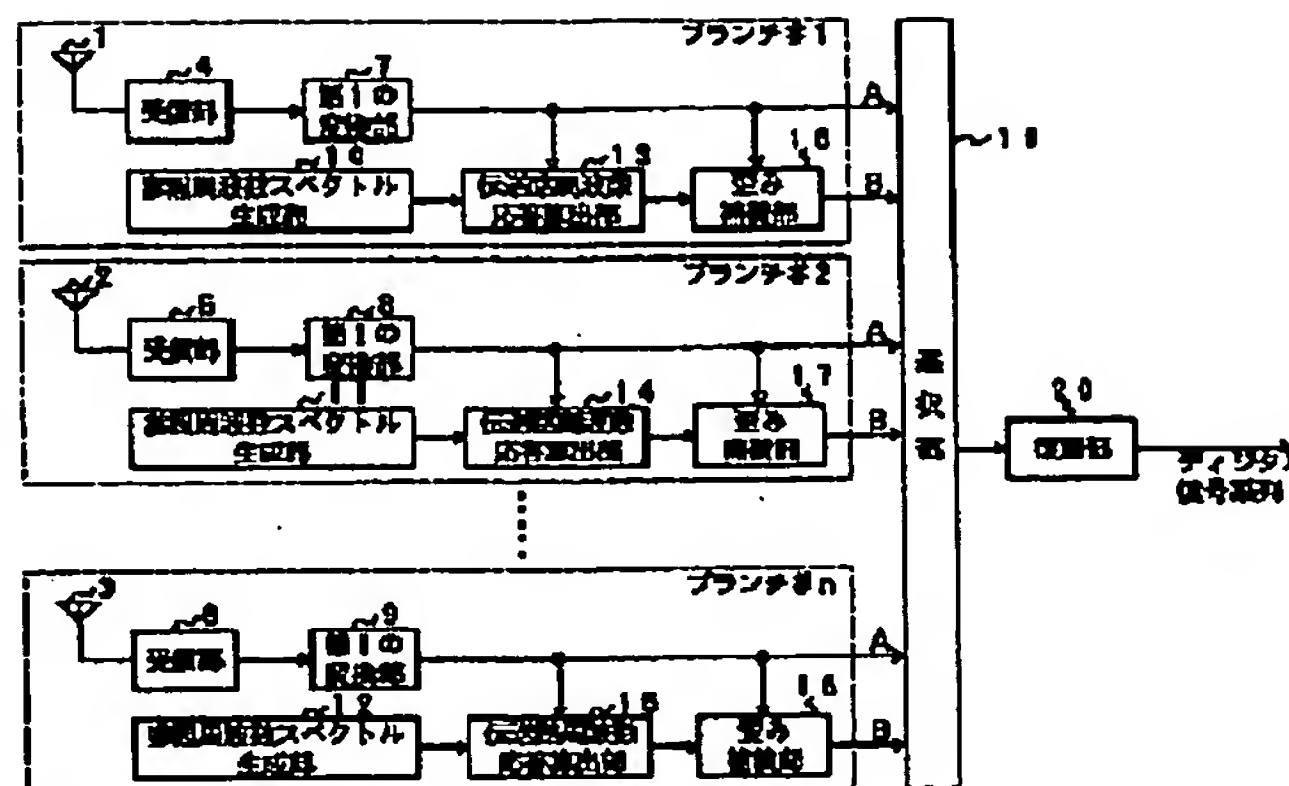
APPLICATION DATE : 08-01-98  
APPLICATION NUMBER : 10002509

APPLICANT : TOSHIBA CORP;

INVENTOR : NAMEKATA MINORU;

INT.CL. : H04J 11/00

TITLE : OFDM DIVERSITY RECEPTION  
DEVICE



**ABSTRACT :** PROBLEM TO BE SOLVED: To provide a diversity reception device improving the deterioration of a reception characteristic in a multiplex reflected radio wave transmission environment in the radio communication/broadcasting system of an OFDM (orthogonal frequency division/multiplex) transmission system.

**SOLUTION:** OFDM reception signals from reception parts 4-6 connected to antennas 1-3 are converted into frequency spectrums in first conversion parts 7-9 and a transmission line frequency response is obtained in transmission line frequency response calculation parts 13-15 from the OFDM reception signal frequency spectrums and reference frequency spectrums from reference frequency spectrum generation parts 10-12. The distortion of the OFDM reception signal frequency spectrum is compensated by using the corresponding transmission line frequency response in distortion compensation parts 16-18. A selection part 19 selects a second input signal corresponding to a first input signal whose amplitude or power becomes maximum with the OFDM reception signal frequency spectrum and the frequency spectrum after compensation as the first and second input signals. A demodulation part 20 demodulates a digital signal group from the output signal of the selection part 19.

COPYRIGHT: (C)1999,JPO